# **SEAN BURGESS**

Portfolio | LinkedIn | Email | Houston, TX

### Languages & Aptitudes

Python (NumPy, pandas, Matplotlib, Seaborn, Scikit-Learn, PyTorch), SQL, Git, HTML, MS Office

### **Technical Skills**

Data Visualization, Regression (Linear, Logistic), Classification (K-NN, SVM, Random Forest)

### **PROJECTS**

## **Best Selling Books Exploratory Data Analysis**

Link

- Cleaned and explored Amazon's top 50 books dataset
- Summarized correlation between multiple variables, such as genre and user rating
- Visualized and plotted various distributions, such as violin and kernel density estimate plots

# **Bayesian Analysis in Predicting Overconfidence**

<u>Link</u>

- Simulated a population of entrepreneurs distributed among three skill types
- Tested a multitude of scenarios in which the entrepreneurs learn from prior experience
- Analyzed perceived skill distributions to understand apparent overconfidence

# **Currency Crises Predictions**

Link

- Combined large data sets from the World Development Indicators DataBank
- Trained decision trees and identified accurate classifiers in MATLAB
- Predicted currency crises within rich countries

### **EDUCATION**

### **University of Houston**

Graduated 2020

Mathematics, B.S.

Minor in Economics

Courses: Computer Science & Programming (Python), Intro to Programming (C++), Computing for Engineers (MATLAB), Advanced Linear Algebra, Probability, Statistics, Stochastic Processes

# Udacity

Deep Learning Nanodegree

Skills Covered: Deep Learning, Neural Networks (Convolutional, Generative Adversarial, Recurrent)

### **EXPERIENCE**

## **Trading Systems Developer**

Current

- Build trading systems using EasyLanguage within TradeStation
- Backtest various portfolios using multiple strategies
- Implement multiple data stream strategies, such as a daily/weekly dual stream

Mathematics Tutor 2018 - 2021

FindTutors, Peer Tutoring

- Tutored in all areas of mathematics up to a high school level, such as pre-calculus and statistics
- Tutored former peers and colleagues in university level mathematics, such as probability and calculus